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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,666	05/30/2001	Yoshihisa Yamaji	35.C15626	5120

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EXAMINER

STERRETT, JONATHAN G

ART UNIT PAPER NUMBER

3623

DATE MAILED: 10/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/866,666

Applicant(s)

YAMAJI ET AL.

Examiner

Jonathan G. Sterrett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 41-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 41-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8 September 2006 has been entered.

This **Non-Final Office Action** is responsive to applicant's amendment filed August 18, 2006. Applicant's amendment of August 18, 2006 amended **Claims 41, 45, 46 and 49-51**. Currently **Claims 41-51** are pending.

Response to Amendments

2. The 35 USC 112 rejection of claim 49 is withdrawn.

Response to Arguments

3. The applicant argues on page 12 that Henson and Engler fail to teach the cited limitations of Claim 46.

The examiner respectfully disagrees.

In response to applicant's argument that Henson and Engler fail to teach the limitations of Claim 46, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or

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all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Henson teaches that adding items to an order inventory list (i.e. a list of items that a customer wishes to place an order for) extends the date for delivery, because the additional items delay the shipment.

Engler teaches where order information that results in a shipment is dependent upon the weight and volume information associated with an order. Engler teaches that the shipping system relies on this information (including pack information, which is how the product boxes are to be packed on a truck). Thus, according to Engler, correct packing information is necessary to ensure total volume utilization on a truck. (For example, if boxes were haphazardly packed on a truck, with lots of intervening air spaces, then the cube capacity of the trailer would not be utilized – similar to a family rearranging suitcases in their car to squeeze in the last suitcase, i.e. better cube utilization). According to Engler's teaching, if a truck is full, then an additional order, results in a delay, because that same truck cannot add any more orders. (Note in page 3 para 4, that a full trailer results in the truck being sent to the distribution center --- also note on page 2 para 9, that the teachings Engler addresses, is attempting to ensure that every truck is completely full, i.e. no empty trailers and no LTL loads).

One of ordinary skill in the art would recognize that by combining the teachings of Henson and Engler, the claimed invention is made obvious. Henson teaches that adding articles to an order extends the shipment time and Engler teaches that an order has an associated cube and weight requirement with it, therefore, adding items to an order result in that order requiring more weight and volume capacity in a truck. Engler further teaches that when a truck is full, that no more orders (i.e. articles requiring weight and volume capacity) can be added to that truck and thus another truck is required. Adding articles to an order, as taught by Henson, results in delays. Additional cube and weight associated with a larger order would cause a delay according to Engler, because additional trucks are required (i.e. since a current truck is full). Engler teaches that an additional truck is due to the cube and weight requirements for an order.

One of ordinary skill in the art, would recognize that the adding step and the changing step would be suggested to one of ordinary skill in the art of logistics planning and execution according to the combined teachings of Henson and Engler, as discussed above.

4. The applicant argues on page 13, regarding Claim 50 that Henson fails to teach a benefit that is in relation to the changed service information.

The examiner respectfully disagrees.

Although as noted before, the pricing information provides a discount that is

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distinct to each order and changes with respect to a total price (i.e. as in a total discount on pricing), a better example of the teaching that the benefit is a discount which changes in correspondence to changing service information is given in Henson's user menu as illustrated in Figure 9 where the user can select different delivery options, including a delay (2nd business day or next business day) with a corresponding shipment delay (i.e. 1 day between the above options – also a "lowest-cost delivery" option is the cheapest with a corresponding delay – "shipping time will be longer").

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 41, 46 and 51 cites two different benefits. It is not clear, on the surface, if these are the same benefit or not. Both citations of the claim language refer to "a" benefit. If the applicant wishes them to be the same, then the examiner requests that the second benefit cited be prefixed by the term "said" benefit.

Claims 42-45 and 47-50 depend on claims 41 and 46, respectively, and are indefinite at least for the reasons cited above for Claims 41, 46 and 51.

7. Claim 50 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 50 refers to a benefit cited in claim 46. Claim 46 cites two benefits where it is not clear which benefit Claim 50 refers back to. The first benefit in Claim 46, is cited

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in the context of storing service information. The second benefit is cited in the context of changed service information. The claim, as cited, does not make it clear these are one and the same benefit. For the purposes of examination, the examiner assumes that Claim 50 is referring to the second benefit in the claims.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 USC. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 41, 42, 44-47 and 49-51** are rejected under 35 USC. 103(a) as being unpatentable over **Henson** US Patent 6,167,383 in view of **Engler**.

Engler, Natalie; "The supply chain's most neglected link", Feb 1997, Software Magazine, Englewood, Vol. 17, Iss. 2, p.72, 6 pages, ProQuest ID 10958394.

Regarding **Claim 46**, Henson teaches:

a communication step of communicating information with a plurality of terminal apparatuses through a predetermined communication line so as to receive an order for an article that includes a designation of a specific date regarding the order from each of the plurality of terminal apparatuses;

Figure 9, #120, Dell's online store communicates information to a plurality of terminal apparatuses (i.e. PC's communicating with the online store over the internet) so as to receive an order for an article (i.e. a PC from Dell). The receipt of an order for an article includes specifics about the article including designation of a specific date (e.g. next or 2nd business day delivery). – See also Figure 2.

a service information storage step of storing service information, including a benefit, on a service corresponding to an order for an article;

Figure 1 #24, the database stores the order information corresponding to an order for an article (see Figure 11).

Column 5 line 20-25, the shopping cart (driven by the database) stores the service and product information associated with a customer's order.

Column 10 line 44-46, pricing discounts are given to customers (i.e. which is a service benefit). – column 10 line 30-35, the items put in the cart (i.e. stored in the system) determine who the customer is, i.e. including that they qualify for a government discount.

a screen information transmission step of transmitting information of in a mark-up language for an ordering screen to the plurality of terminal apparatuses;

Column 5 line 66-column 6 line 5, information is transmitted over the internet (i.e. in a markup language) for an ordering screen to those wishing to purchase from Dell online (i.e. a plurality of terminal apparatuses).

an order condition information storage step of storing condition information for the order for the article received by said communication step from

each of the plurality of terminal apparatuses;

Figure 3b, the shopping cart stores condition information related to the selection of various products selected by the customer. Here, for example, if the customer selects one of four printers and a scanner, then these items are added to the shopping cart (i.e. storing condition information that these items are part of the order).

a reception step of receiving payment information on an amount of the article included in the order from each of the plurality of terminal apparatuses;

Figure 10, Dell's online store receives payment information for the placing of an order for a PC and related components. E.g. payment information can be received in the form of a credit card (#124).

a comparison step of comparing the condition information after addition by said adding step with a standard value relating to available delivery dates;

column 6 line 48-52, the system compares the customer's order for specific items that are known to extend delivery with the standard value for available delivery dates.

a changing step of changing service information common to the orders for the articles received from the plurality of terminal apparatuses included in the service information stored in said service information storage step, if the comparison made by said comparison step shows that the condition information after the addition by said adding step exceeds the standard value; and

column 7 line 1-8, Certain options if selected by the customer, will result in delivery times being extended beyond the standard value. The system compares the delivery times for these options to the standard delivery times to flag them to the

customer if the customer chooses them.

a service information transmission step of transmitting the service information changed by said changing step and a corresponding benefit to the plurality of terminal apparatuses,

column 7 line 16-21, the service information related to the delayed articles for delivery is transmitted to the customer (i.e. to the variety of terminals since this capability is provided to each customer) if the customer adds these articles to their order.

Column 6 line 64-67, a corresponding benefit to the changed service information is a warning icon that provides additional details regarding how the items individually impact service delivery.

wherein the service information corresponds to one of allocation dates of a vehicle that carries the articles.

Figure 9 #120, the service information, as discussed above, corresponds to one of allocation dates of a carrier (i.e. a vehicle that carries the articles).

Dell teaches where selecting various options for articles for delivery can affect the delivery date, as discussed above, but does not teach where the selected weight or volume information of the article as selected, specifically affects the delivery information as per:

an adding step of adding information obtained in accordance with weight

information or volume information of the article included in an article information table and the amount information received by said reception step to the condition information stored in said order condition information storage step;

a comparison step of comparing the condition information after addition by said adding step with a standard value relating to a loading capacity of a vehicle;

Engler teaches:

an adding step of adding information obtained in accordance with weight information or volume information of the article included in an article information table and the amount information received by said reception step to the condition information stored in said order condition information storage step;

Page 3 para 9, Engler teaches that adding additional orders to a truck, based on the volume (known in the art as 'cube') and weight information, is used to determine how a truck can be filled and if more than one truck is required for a particular order. See also page 2 paragraph 9 – previously, scheduling trailers to minimize LTL's and maximize load carrying capacity was done manually.

a comparison step of comparing the condition information after addition by said adding step with a standard value relating to a loading capacity of a vehicle;

Page 3 para 9, Engler teaches that trailers (i.e. vehicle's) are determined to be full based on the number of orders and the associated weight and cube of those orders in comparison to what that trailer can carry.

Both Engler and Henson address scheduling shipments to customers, thus both Engler and Henson are analogous art.

Henson teaches that informing a customer that a desired item will result in a delay improves customer satisfaction because the customer is informed before ordering that ordering the item will result in a delayed shipment.

Engler teaches that automatically providing for building of trailer (i.e. vehicle) loads based on cube and weight improves customer satisfaction while reducing costs because trailers are more fully loaded en route to their destination, resulting in less delays and lower costs in shipping goods to customers. (page 3 para 7; page 2 para 5).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Henson, regarding providing for an online ordering capability to customers, where customers can custom-build their order and see the impact to delivery time, to include the step of providing an online interface that provides information to the customer indicating changes to delivery schedule based on the weight and volume of their ordered articles as the articles would fit into a delivery vehicle, because it would reduce delivery costs while at the same time improving customer satisfaction.

Regarding **Claim 47** Henson teaches:

wherein the order for an article comprises a request for delivery of a predetermined article or a request for collection of an expendable supply for the article for recycling.

Column 1 line 23-27, the order for the article comprises a request for delivery of a computer system (i.e. a predetermined article) – see also Figure 9 #120 for delivery options (i.e. request for delivery).

Regarding **Claim 49** Henson teaches:

wherein said communication unit notifies one or more of the plurality of terminal apparatuses which ordered the article before the service information is changed of the service information changed by said changing unit.

Column 6 line 59-64, the terminal apparatus is notified of selections in product ordering options that would result in delivery delays beyond the standard delivery terms. These notifications (i.e. shipment delay indicator and warning icons) are sent to the customer's terminal before the customer actually processes the order so that the customer understands beforehand the implications of including those selections in the order.

Regarding **Claim 50**, Henson teaches wherein the benefit information associated with changed service includes a discount rate or point:

Figure 9 notes that different levels of service relating to shipping correspond to a

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discount rate (e.g. next business day is the rate of \$62 per laptop; 2nd business day is \$45 per laptop).

Claims 41, 42, 44, 45 and 51 recite limitations similar to those addressed by the rejections of **Claims 46, 47, 49 and 50** above, and are therefore rejected under the same rationale.

10. **Claims 48 and 43** are rejected under 35 USC. 103(a) as being unpatentable over **Henson** US Patent 6,167,383 in view of **Engler** and further in view of **Gair**.

Gair, Cristina; "Office Trash: Handle with Care", Oct 1999, Home Office Computing, Boulder, Vol. 17, Iss. 10, pg. 28, 1 pgs, ProQuest ID 51412812.

Regarding **Claim 48** Henson teaches ordering, selling and delivering PC's including printers via the internet (i.e. online) and Engler teaches using IT to optimize vehicle loading and logistics planning but Henson and Engler do not teach:

wherein the article is a used item and the order for the article comprises a request for collection of the used item for recycling.

Gair teaches:

wherein the article is a used item and the order for the article comprises a request for collection of the used item for recycling.

Page 1 para 2, the HP program provides for requesting a free pickup (i.e. request for collection) of the toner cartridge (i.e. the used item for recycling).

Gair teaches that recycling used office supplies protects the environment (page 1 abstract).

Gair, Henson and Engler all address issues relating to providing service to customers, thus Gair, Henson and Engler are all analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the collective teachings of Henson and Engler, regarding providing for an online ordering capability to customers, where customers can custom-build their order and see the impact to delivery time, which includes providing an indication of truck loading and routes, to include the step of handling requests for collection of used office supplies for recycling, as taught by Gair, because it would protect the environment from the hazard of used office supplies.

Claim 43 recites limitations similar to those addressed by the rejection of **Claim 48** above, and is therefore rejected under the same rationale.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Supply-chain management for recoverable manufacturing systems

V Daniel R Guide Jr, Vaidyanathan Jayaraman, Rajesh Srivastava, W C Benton.
Interfaces. Linthicum: May/Jun 2000. Vol. 30, Iss. 3; p. 125

Reverse logistics: reuse and recycling programs hold key to reducing
procurement, manufacturing and waste disposal costs

Materials Management and Distribution. Toronto: Sep 1994. Vol. 39, Iss. 9; p. 21

Distribution: Let someone else do it

Witt, Clyde E. Material Handling Engineering. Feb 1997. Vol. 52, Iss. 2; p. 38 (7 pages)

Who's got the goods?

Rick Gurin. Automatic I.D. News. Cleveland: Aug 1999. Vol. 15, Iss. 9; p. 30 (6 pages)

Fleischman, et.al; "A characterization of logistics networks for product recovery",
copyright 2000, International Journal of Management Science, pp.653-666.

Murphy, et.al.; "Management of environmental issues in logistics: Current Status
and future potential", Fall 1994, Transportation Journal, Lock Haven, vol. 34, Iss. 1,
p.48(1), ProQuest ID 4618246.

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Haberland, et.al.; "Logistics as a principal element in creating a recycling economy", Jul/Aug 1997, Logistics Spectrum, 31, 4, Research Library, p.19.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan G. Sterrett whose telephone number is (571) 272-6881. The examiner can normally be reached on Monday-Friday, 8:00AM - 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JGS

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10/17/2006

Romain Janty
Primary Examiner
Art Unit 3623